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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/349,347	07/07/1999	CATHERINE ROSENBERG	585-1003	6531

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EXAMINER

ABELSON, RONALD B

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 08/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/349,347

Applicant(s)

ROSENBERG ET AL.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 17-35 and 39-44 is/are rejected.
- 7) ☒ Claim(s) 14-16 and 36-38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

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Claim Objections

1. Claims 2 and 8 are objected to because of the following informalities: Both claims must be separated from the prior claim. The claims are objected to because the lines are crowded too closely together, making reading and entry of amendments difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b). Appropriate correction is required.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

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Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 3, 4, 7-11, 17-25, 29 - 33, and 39-44 rejected under 35 U.S.C. 102(e) as being anticipated by Smith (US 6,222,823).

Regarding claims 1, 19, 23, and 44, Smith teaches a method and apparatus for an integrated CAC and BoD/DBC system for allocating the resource of a common medium uplink of a multiple access asynchronous network segment (fig. 1 box 18, 20, col. 5

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lines 1 - 25). The CAC comprises a means for allocating a static resource to all virtual connections or grouping of VCs accepted by the CAC and a means for booking a dynamic resource to the VC or groupings of VCs that require a guaranteed dynamic resource (fig. 1,2, CAC to allocate bandwidth, col. 5 lines 12 - 45, communicates a maximum CR, col. 5 lines 57 - 67), and a BoD comprises a means for allocating a dynamic resource to the VCs (controls or "shapes" the traffic, col. 6 lines 18 - col. 7 line 21).

Regarding claims 3 and 24, the CAC allocates a static resource to a VC when a VC is set up for the duration of the connection associated with the VC (col. 5 lines 35 - 45, sufficient bandwidth, col. 13 lines 40 - 50).

Regarding claims 4, 7, 8, 25, 29, and 30, a means for accepting a VC based upon the available bandwidth and the predetermined bandwidth required (col. 5 lines 57 - 67).

Regarding claims 9, 31, and 43, CAC allocates resources on a periodic basis (col. 9 lines 13 - 25).

Regarding claims 10 and 32, a means for deallocating resources (col. 3 lines 36 - 53).

Regarding claims 11 and 33, in addition to the limitations listed in claim 9, allocations made by the BoD are time

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independent (allocation occurs if sufficient bandwidth is available, col. 5 lines 57 - 67).

Regarding claims 17, 18, 20, 21, 39, 40, and 42, in addition to the limitations listed in claim 1, an allocation table for resource allocation (col. 10 lines 55 - 67).

Regarding claims 22 and 41, in addition to the limitations listed in claim 1, a means for shaping the traffic (col. 6 lines 18 - col. 7 line 21).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2, 5, 6, 12, 13, 26-28, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith as applied to claim 1 above, and further in view of Fan (US 6,408,005).

Regarding claims 2 and 26, although Smith teaches QoS (col. 1 lines 58 - 65), the inventor is silent on its implementation.

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Fan teaches grouping VC's according to a particular traffic class (col. 9 lines 18 - 27, 42 - 65).

Therefore it would have been obvious to one of ordinary skill in the art, having both Smith and Fan before him/her and with the teachings [a] as shown by Smith, an integrated CAC and BoD/DBC system for allocating the resource of a common medium uplink of a multiple access asynchronous network segment, and [b] as shown by Fan, grouping VC's according to a particular traffic class, to be motivated to modify the system of Smith by modifying the software of the CAC to account for processing of input streams dependent upon different QoS categories. This would improve the system by prioritizing the most important traffic flows through the network.

Regarding claims 12 and 34, in addition to the limitations previously listed, allocations for the current period are dependent on the allocations made the last period (Fan: eq. 24, col. 11 line 57 - col. 12 line 48).

Regarding claims 5, 6, 27, and 28, changing the mount of a static resource / bandwidth allocated to a group of VCs at connection set up or release time (Fan: Dynamic Rate Control, Continuous time Model, col. 9 line 17 - col. 11 line 7). Note in the passage listed the bandwidth allocation to each grouping is continuously being recomputed.

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Regarding claims 13 and 35, in addition to the limitations previously listed, the BoD allocates the VC or group of VCs a share of the remainder of the requested resource, from the remaining resource capacity (excess rate, excess bandwidth, col. 10 line 25 - col. 11 line 7).

Allowable Subject Matter

5. Claims 14-16 and 36-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned

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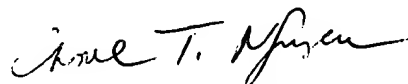
are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.


Ronald Abelson
Examiner
Art Unit 2663



August 21, 2002


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